

#### STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION



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**Phone:** 860-594-3129

August 21, 2013

State Project No. 171-367 (F.A.P. No. 000R(797)): Replacement of Expansion Joints in District 1, in the Towns of Vernon, Manchester, E. Hartford, Wethersfield, Hartford, Southington & Enfield.

#### **NOTICE TO CONTRACTORS:**

This is to notify all concerned and especially the prospective bidders that the bid opening for the subject project is currently scheduled for <u>September 25, 2013</u> at 2:00 P.M. in the Conference Room of the Department of Transportation Administration Building, 2800 Berlin Turnpike, Newington, Connecticut.

<u>Addenda No. 1</u> is attached and can also be obtained on the Statewide Contracting Portal at <a href="http://www.biznet.ct.gov/scp\_search/BidResults.aspx?groupid=64">http://www.biznet.ct.gov/scp\_search/BidResults.aspx?groupid=64</a>

This addendum is necessary to revise contract documents.

The Department has established a general mailbox to receive contractor questions. Please send all future questions to **DOTContracts@ct.gov** 

Philip J. Melchionne

For: Gregory D. Straka Contracts Manager

Division of Contracts Administration

# AUGUST 20, 2013 REPLACEMENT OF EXPANSION JOINTS IN DISTRICT 1 FEDERAL AID PROJECT NO. 000R(797) STATE PROJECT NO. 171-367 TOWNS OF: VARIOUS

#### ADDENDUM NO. 1

### SPECIAL PROVISION NEW SPECIAL PROVISION

The following Special Provision is hereby added to the Contract:

• <u>ITEM NO. 0406305A – CLEANING AND RESEALING FILLED BRIDGE</u> <u>JOINTS</u>

#### **CONTRACT ITEMS**

#### NEW CONTRACT ITEM

ITEM NO.	<u>DESCRIPTION</u>	<u>UNIT</u>	<b>QUANTITY</b>
0406305A	<b>CLEANING AND RESEALING</b>	<u>L.F.</u>	<u>59</u>
	FILLED BRIDGE JOINTS		

#### **REVISED CONTRACT ITEMS**

ITEM NO.	DESCRIPTION	<b>ORIGINAL</b>	<b>REVISED</b>
		<b>QUANTITY</b>	<b>QUANTITY</b>
<u>0520035A</u>	SILICONE EXPANSION JOINT	723 L.F.	666 L.F.
	<u>SYSTEM</u>		
<u>0601250A</u>	CONSTRUCT CONCRETE HEADERS	<u>73 C.Y.</u>	<u>66 C.Y.</u>

#### **PLANS**

#### **REVISED PLANS**

The following Plan Sheets are hereby deleted and replaced with the like-numbered Plan Sheets: 02.01.A1, 03.04.A1, 03.05.A1, 03.06.A1

The Detailed Estimate Sheet does not reflect these changes.

The Bid Proposal Form has been revised to reflect these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

#### <u>ITEM #0406305A – CLEANING AND RESEALING FILLED BRIDGE</u> JOINTS

**Description:** Work under this item shall consist of replacing a neoprene strip seal type gland between steel extrusions welded to steel header plates.

Work under this item shall also consist of cleaning and resealing the gap between one of the steel header plates and an abutting concrete header. Note that the abutting concrete header is located on a concrete approach slab.

Work under this item shall also consist of replacing sealant in counter sunk holes in the steel plates and replacement of deteriorated anchor bolt hardware where encountered.

**Materials:** The materials shall conform to the following requirements:

Strip Seal gland: The continuous gland shall be a flexible, non-reinforced extruded neoprene compound, Type SE-300, as manufactured by Watson Bowman Acme.

Backer Rod: Backer rod shall satisfy the requirements of ASTM D5249, Type 1.

Two part silicone sealant: Shall conform to the products listed in Table A:

Product	Supplier
Dow Corning 902RCS	Dow Corning Corporation
	2200 W Salzburg Road
	Auburn, Michigan 48611
	BASF/Watson Bowman Acme Corporation
Wabo SiliconeSeal	95 Pineview Drive
	Amherst, New York 14228

#### Table A

Other two-component silicone joint sealants expressly manufactured for use with concrete that conform to the aforementioned ASTM requirements will be considered for use provided they are submitted in advance for approval to the Engineer. Other joint sealants will be considered for use only if a complete product description is submitted, as well as documentation describing at least five installations of the product. These documented installations must demonstrate that the product has performed successfully for at least three years on similar bridge expansion joint applications.

Lubricant Adhesive: Shall be as recommended by the Manufacturer of the neoprene gland.

Replacement Nuts and Washers: Steel nuts shall conform to ASTM A563, Type C. Hardened steel washers shall conform to ASTM F436, Type 1. Nuts and washers shall be hot-dip galvanized in accordance with ASTM A153.

A Materials Certificate for the replacement gland, backer rod, 2 component silicone sealant, and the nuts/washers shall be submitted by the Contractor in accordance with the requirements of Article 1.06.07

#### **Construction Methods:**

**General:** During the work operations the Contractor shall bring to the Engineer's attention serious defects in the existing joint system. "Serious defects" shall be construed to mean loose steel header plates, missing anchor bolts, and cracks in the steel header plates or extrusions. Close attention shall be paid to field welded splices at stage construction locations.

Gland Replacement: The existing neoprene gland shall be removed from the steel extrusions. All components of the existing neoprene gland, including the attachment lugs ("ears"), as well as the original lubricant adhesive, shall be removed from the steel extrusions. After removal of all components of the old gland, the replacement strip seal gland shall be installed in a continuous length along the deck and up the curbs. A lubricant adhesive shall be used to install the strip seal gland into the steel extrusions as required by the manufacturer. No field splices in the replacement gland will be permitted.

Any section of the replacement strip seal gland that is punctured, ruptured, cracked, bent or damaged in any other way shall be removed and replaced by the Contractor at no additional cost to the State.

**Gap Sealing:** The gap between the steel plate and the concrete header (on the approach slab) shall be filled with two part silicone sealant in accordance with the following:

Before placement of any sealing materials into said gap, the gap shall be thoroughly cleaned of all scale, loose concrete, dirt, dust, or other foreign matter by abrasive blast cleaning. Residual dust and moisture shall then be removed by blasting with oil free compressed air using a hot air lance. Projections of concrete into the joint space shall also be removed. A backer rod of diameter at least 25% greater than the existing gap width, at the time of installation, shall be installed in the gap. The joint shall be clean and dry before the joint sealant is applied.

Whenever abrasive blast cleaning is performed under this specification, the Contractor shall take adequate measures to ensure that the abrasive blast cleaning will not cause damage to adjacent traffic or other facilities.

The joint sealant shall be prepared and placed in accordance with the manufacturer's instructions and with the equipment prescribed by the manufacturer. Extreme care shall be taken to ensure that the sealant is placed in accordance with the manufacturer's recommended thickness requirements.

The joint sealant shall be tooled, if required, in accordance with the manufacturer's instructions.

Primer, if required, shall be supplied by the sealant manufacturer and applied in accordance with the manufacturer's instructions.

When the sealing operations are completed, the gap shall be effectively sealed against infiltration of water. Any sealant which does not effectively seal against water shall be removed and replaced at the Contractor's expense.

Any sealed gap that exhibits evidence of failure, as determined by the Engineer, such as debonding or cracking shall be removed and replaced to a length determined by the Engineer.

Countersunk Holes: Existing countersunk holes in the steel header plates shall be cleaned of existing materials and resealed. After cleaning, the existing nuts shall be examined for signs of obvious defects such as severe rusting, impact damage, or rose budding. Superficial or rust stain conditions are not considered a condition requiring replacement. Nuts identified as defective shall be replaced in kind with new galvanized nuts and washers wherever possible. The size of the anchor rods is believed to be 7/8" diameter; however, the Contractor shall verify this during construction. Loose nuts, that can be removed, shall also be replaced. Loose nuts that cannot be removed shall be retightened in place. Cleaning of the countersunk holes shall be done by abrasive blast cleaning, as described above, unless other cleaning methods are deemed satisfactory by the Engineer. The holes shall then be filled with the two component silicone joint sealant flush with the surface of the steel headers. The silicone sealant shall be prepared and placed in accordance with the manufacturer's instructions and with the equipment prescribed by the manufacturer. Primer, if required, shall be supplied by the sealant manufacturer and applied in accordance with the manufacturer's instructions.

All work shall be done in accordance with the special provisions for "Maintenance and Protection of Traffic" and "Prosecution and Progress". Sealing operations shall take into consideration the cure time of the silicone sealant to avoid wheel tracking.

**Method of Measurement:** This work will be measured for payment by the number of linear feet of replacement strip seal type gland installed between steel extrusions. The upturns at the curbs shall also be measured for payment.

**Basis of Payment:** This work will be paid for at the contract unit price per linear foot for "Cleaning and Resealing Filled Bridge Joints" complete in place, which price shall include removal of all materials described herein, all cleaning including abrasive blast cleaning, the furnishing and installation of all replacement materials, and all other materials, tools and labor incidental thereto.

171-367 ITEM #0406305A 4 ADDENDUM NO. 1